

## **Outstanding Projects for 2002**

### **Succor Creek/ Homedale School District Water Quality**

The Succor Creek/Homedale School District Water Quality Project is highlighted this year because the project involves simple straightforward methods to clean up water that has for many years been subject to agriculturally related pollution. The project is removing sediment and nutrients from the return water with bioretention and biofiltration wetlands before it reaches Succor Creek. Succor Creek, a 303(b) listed stream for sediment, will now meet TMDL targeted loads easier with this treatment. This site will also provide an example to area producers who face similar water quality issues.

This project is a good example of joint efforts between multiple land owners, local officials, the local school district, DEQ, the Owyhee SCD, the NRCS, the Department of Agriculture, a local consultant engineering company and ordinary citizens. Mr. Bill Moore of the Owyhee SCD has been involved in the project from the beginning. He has facilitated the planning meetings for the last three years and has helped to develop the grant including tasks, outputs, and milestones.

The school's staff and students as a continuing science project will monitor the wetland. No future funding will be required, as any additional equipment will be purchased through the school's general funds. Samples will be taken at regular points and intervals on the site with assistance from the Department of Agriculture. Subsequently, the students and staff will continue the monitoring as part of the school's curriculum.

During the field evaluation DEQ determined that the project has been constructed in a satisfactory manner. All excavations for the forebay, filterstrip and water impoundment areas are complete. The weir and outfall structure for water level control is installed and functioning. The appropriate wetland plants were installed approximately two months prior to the evaluation and appeared to be flourishing. While there was no irrigation taking place at the time of our evaluation, water was diverted into the complex to demonstrate that the appropriate grades were achieved during construction. The flow rate and patterns match what had been anticipated in earlier planning stages.

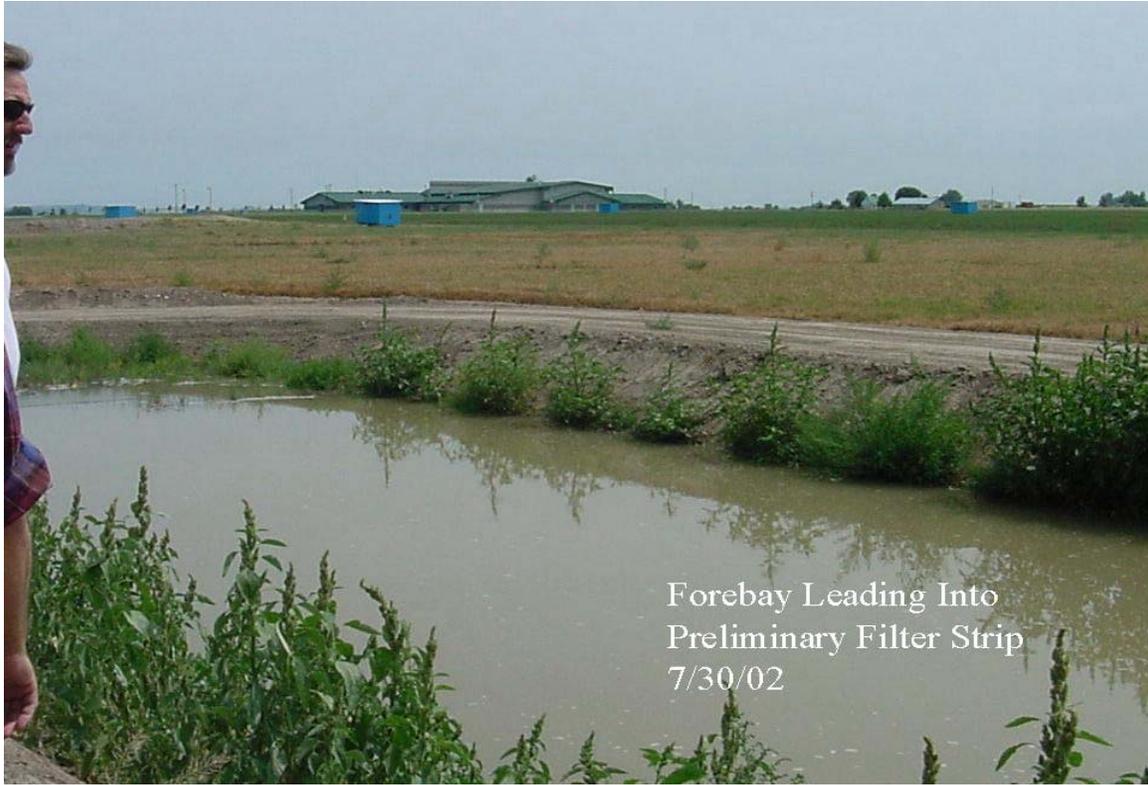
Irrigation at this site is not a constant. While there will be enough water to support the plant community, the levels will seldom be at the design capacity. We therefore discussed the possibility of diverting some of the flow of a nearby stream into the complex to help drive the hydrology and to utilize the filtering capacity of the wetlands to improve water quality in this similarly impacted stream. Mr. Moore will investigate this possibility further.

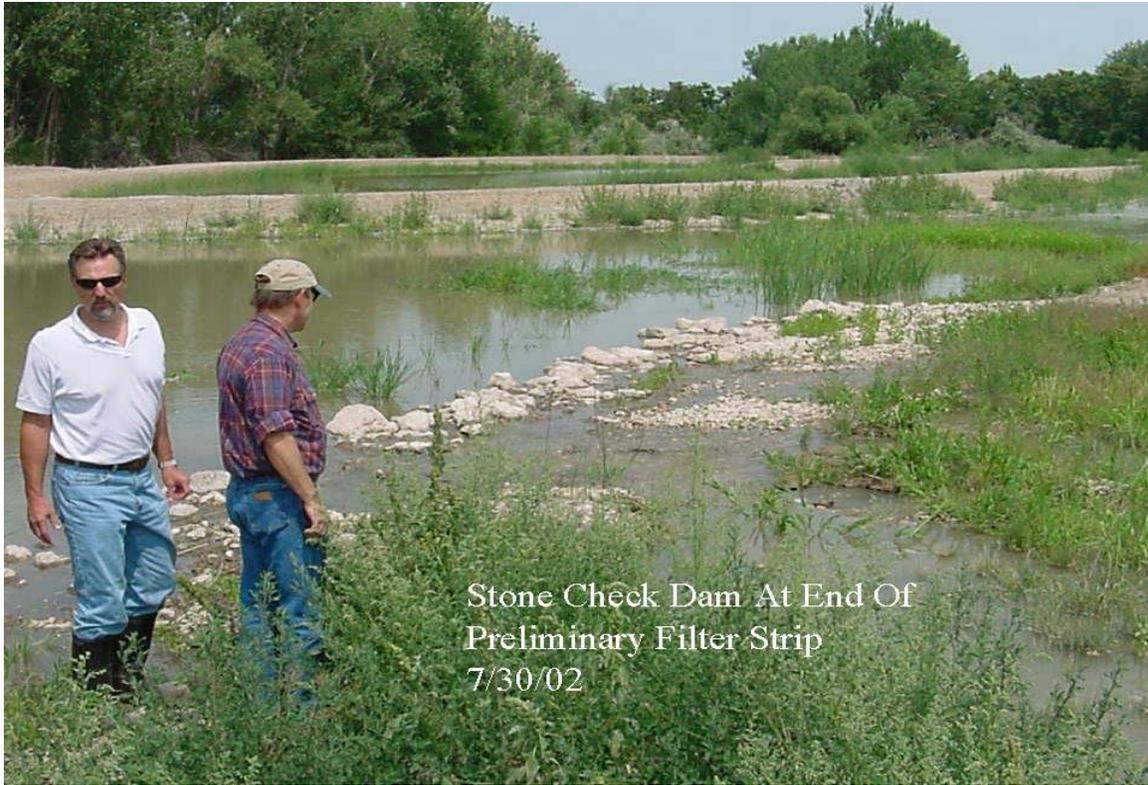
Although chemical sampling will be part of the future monitoring regiment, a visual inspection of the water leaving this site showed that it was indeed cleaner than water coming into the wetlands.

Staff anticipates that as the vegetative community matures in the constructed wetland this project will provide the dual functions of cleaning up NPS contamination while providing an outstanding educational tool for the school and the community. There are plans to add a pavilion structure to aid in the education of students and the community.

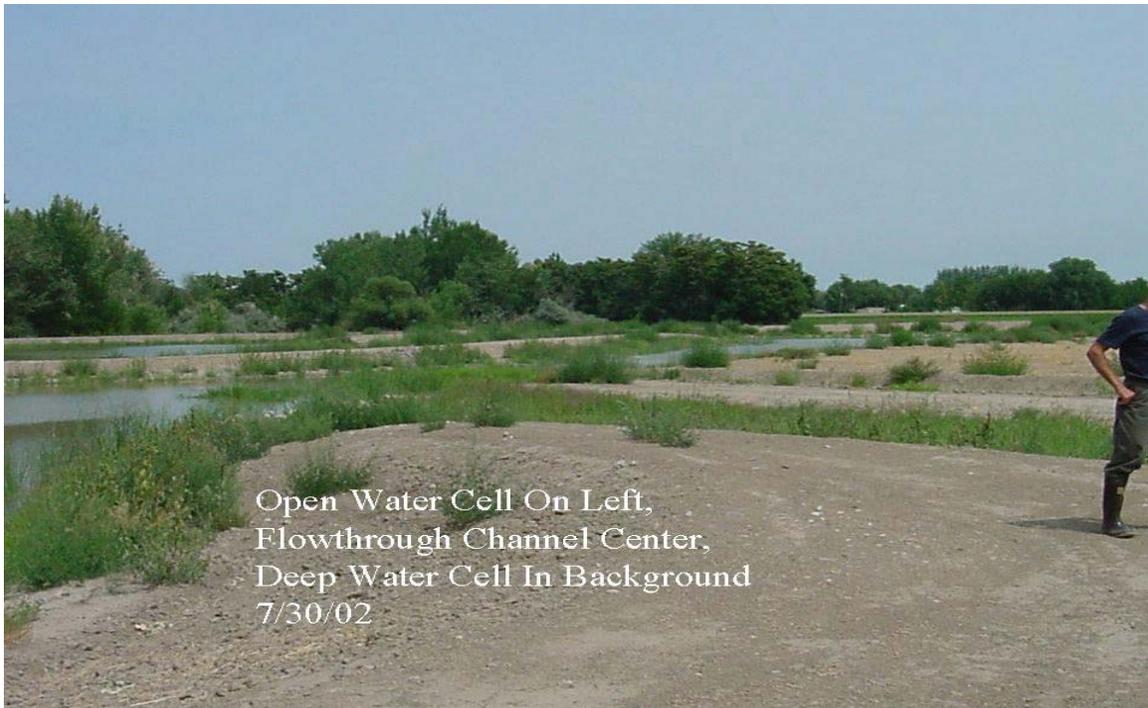
Following are photographs taken during the project evaluation.







Stone Check Dam At End Of  
Preliminary Filter Strip  
7/30/02



Open Water Cell On Left,  
Flowthrough Channel Center,  
Deep Water Cell In Background  
7/30/02





Restored Bank, Succor Creek  
Left View 7/30/02



Rapidly Establishing  
Wildlife Community 7/30/02